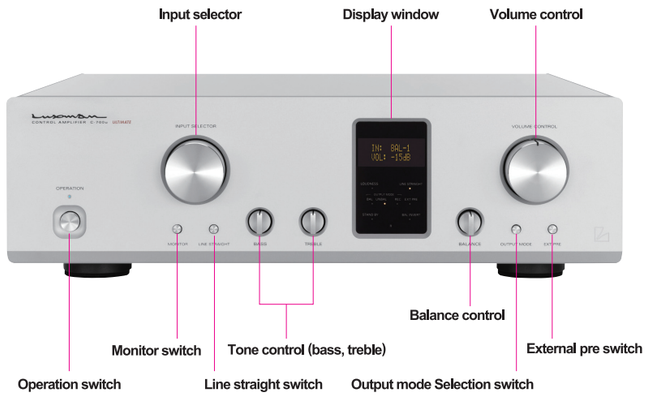
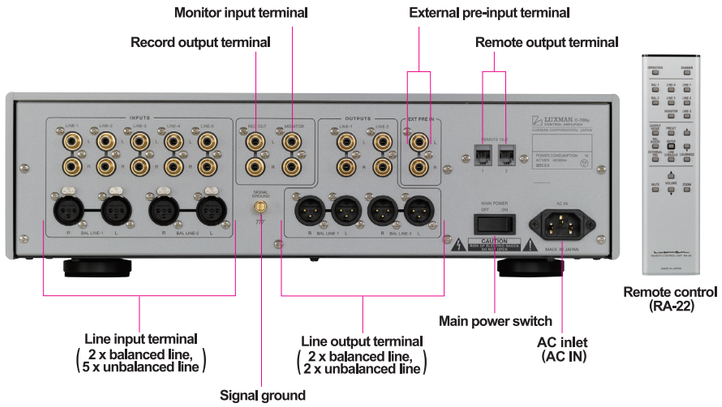
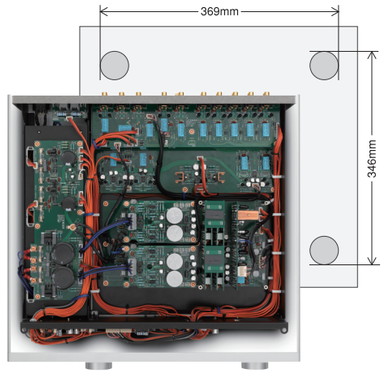
C-700u CONTROL AMPLIFIER





SPECIFICATIONS

Input sensitivity/ Input impedance	Unbalanced 250mV/46kΩ Balanced 250mV/67kΩ
Output/Input impedance	Unbalanced rating 1V/90Ω, max. 11V Balanced rating 1V/600Ω, max. 11.5V
Frequency response	20Hz to 20kHz (+0, -0.1dB) 5Hz to 120kHz (+0, -3.0dB)
Total harmonic distortion	Unbalanced 0.007% (20Hz to 20kHz) Balanced 0.010% (20Hz to 20kHz)
S/N ratio (IHF-A)	Unbalanced 125dB Balanced 122dB
Volume adjustment	New LECUA1000
Amplification circuit	ODNF 4.0
Max. change amount of tone control	BASS: ±8dB at 100Hz TREBLE: ±8dB at 10kHz
Remote control functions	・Operation ・Dimmer ・ Input selector ・Output mode ・Balanced phase selection ・Record output ・External pre-input ・Line straight ・Loudness ・Volume up/down ・Mute ・Zoom
Power consumption	28W 2.0W (at standby)
External dimensions	440(W) x 130(H) x 430(D) mm front side knob of 17mm and rear side terminal of 14 mm included in depth
Net weight	14.6 kg
Accessories	Remote control (RA-22) Power cable



Internal configuration

Stereo power amplifier inheriting the philosophy and performance from the top-end models

STEREO POWER AMPLIFIER
M-700u

SPECIFICATIONS

Rated output	120W + 120W (8Ω)/at stereo 210W + 210W (4Ω)/at stereo 420W (8Ω)/at monaural
Instantaneous max. output	840W + 840W (1Ω)/at stereo 1,680W (2Ω)/at monaural
Input sensitivity	1.1V/120W (8Ω) GAIN 29.0dB
Input impedance	Unbalanced 51kΩ Balanced 34kΩ
Frequency response	20Hz to 20kHz (+0, –0.1dB) 1Hz to 130kHz (+0, –3.0 dB)
Total harmonic distortion rate	0.009% or less (1kHz/8Ω) 0.1% or less (20Hz to 20kHz/8Ω)
S/N ratio (IHF-A)	115dB
Amplification circuit	ODNF 4.0
Output configuration	Bipolar 4-parallel push-pull
Power transformer	EI type 550VA
Damping factor	350
Power consumption	370W 110W (under no signal) 0.4W (at standby)
External dimensions	440(W) x 190(H) x 427(D) mm front side knob of 2mm and rear side terminal of 38 mm included in depth
Net weight	27.5kg
Accessories	Dedicated remote cable Power cable
Speaker terminal Supported Y-lug terminal dimension	Width of part a: 14mm or less Width of part b: 7mm or more a b * Connection may not be performed depending on the shape of the Y-lug terminal.

LUXMAN

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⚠ Safety Cautions

To ensure correct use of this product, read the “Owner’s Manual”prior to use. Failure to follow all safeguards can result in fire,electric shock,or other accidents.

*Design and specifications are subject to change without notice.

2014.12-HB C-700u

LUXMAN

CONTROL AMPLIFIER
C-700u

Longing dream comes true—
Flagship pedigree of exquisite sound

C-700u, a control amplifier, is a new middle range model that inherits our magnificent configuration including the latest version, ODNF 4.0 circuit whose distortion characteristics and S/N performance have been significantly improved and with which the top-end model, C-900u, has been equipped and also including new "LECUA1000", a computerized attenuator directly connected to the amplifier, which enables smooth volume change without any deterioration of sound quality to pursue the concept "simple and high-quality control amplifier exclusively for line signal level". What is more, this unit is also multifunctional with the loudness function interlocking with the tone control and sound volume, external pre-input terminal, FL display with zoom and dimmer function.
These make C-700u suitable for a system control center, and a new-generation control amplifier that makes performance consistent with functions at a high level.

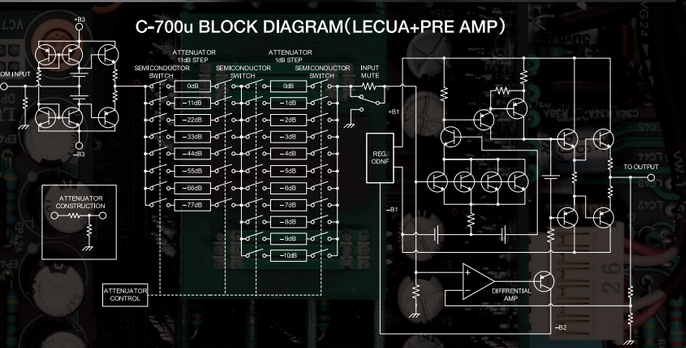
New LECUA 1000 and ODNF version 4.0

Just like C-900u, our top-end model, new LECUA 1000 that is the integration of a highly precise attenuator that is switched by the electronically-controlled fixed resistance and an amplifier circuit part, is embedded in an unbalanced configuration as the sound volume adjustment mechanism that is the fundamental function of a control amplifier. This system is extremely insensitive to external vibration and change in sound quality depending on the volume positions, and also its durability is significantly high. The number of steps is increased from 72, the preceding model's to 88 and this makes more delicate sound volume adjustment possible within 0 to -87 dB without deterioration of sound quality. Because LECUA 1000 control is used for balance adjustment between right and left, there is no need to worry about sound quality deterioration. The latest version, ODNF4.0 circuit, that has achieved primary slew rate speed indicating the startup performance by feeding back only distortion components, ultra-wide bandwidth, and low level of distortion is adopted for the combined amplifier circuit. ODNF 4.0 has acquired higher performance by making the first stage of the main amplifier 4 parallels, second stage Darlington connection, and the first stage of the error detection amplifier 3 parallels. The distortion characteristics at high frequencies in particular has been significantly improved by minimizing the amount of feedback and enhancing the S/N performance.

* LECUA is an abbreviation of Luxman Electric Controlled Ultimate Attenuator.
* ODNF is an abbreviation for "Only Distortion Negative Feedback".

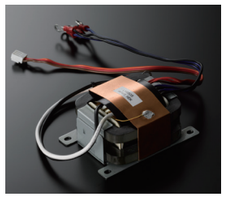
New LECUA 1000 + ODNF version 4.0 board

C-700u BLOCK DIAGRAM(LECUA+PRE AMP)



Large-capacity power supply circuit

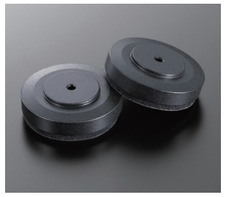
In order to embody the philosophy of "Power Amplifier Driver" meaning a component to powerfully drive the power amplifier connected to the next stage, a high-power power supply environment with a large-capacity OI-type power transformer and 2 units of 3,300μF block capacitors is secured. This circuit strongly supports the sound quality of C-700u from the bottom.



Large-capacity OI-type power transformer

Gradation cast-iron leg

A loopless chassis structure is used for the cabinet to eliminate increased ground impedance and the effect of generated magnetic field. Gradation cast-iron insulator legs are attached to prevent resonance thanks to its characteristics of that the metallic structure becomes smaller from the center to the periphery of the leg.



Gradation cast-iron insulator leg

Zoom display mode

The dimmer function-equipped FL display with a high level of visibility can display in 4-fold zoom by operating the remote control while it usually displays the input and sound volume in a 2-stage fashion, and the display is also eye-friendly from the listening position.

Zoom mode display at normal or zoomed mode

Specially selected custom parts

C-700u consists of original custom parts such as resistances, capacitors, even all wires, which have been designed or selected from Luxman's highly advanced know-how and sensibility accumulated in producing audio products for a long time, considering the sound quality as the first priority. Those parts have contributed to the realization of rich tone that Luxman has pursued.

Original custom parts

External pre-input terminal and balanced phase selection

C-700u is equipped with an unbalanced external pre-input terminal to which the pre-amplifier output terminal of your AV system can be connected. The phases (No. 3 (HOT), No. 2 (HOT)) of the balanced input can be switched and memorized in every terminal, which is useful for connecting to foreign-made components.

External pre-input terminal

Comfortable remote control operation

The slim aluminum remote control that provides comfortability in hand allows users to operate a wide variety of functions of C-700u such as input selection, sound volume adjustment, zoom display, dimmer function, loudness function,from the listening position.

Dedicated remote control (RA-22)

Pre-amplifier circuit in 3D layout

New LECUA 1000 uses the arrangement of substrates in three dimensions, i.e. 3D layout to both minimize the signal route and improve its efficiency. The ultimate solution as a control amplifier is realized by the direct connection between the attenuator circuit and amplification circuit eliminating the idea of independent individual circuit blocks.